<u>We claim:</u>

A recombinant adenoviral vector comprising a deletion of E1b region gene(s), and optionally, the substitution therefore a heterologous gene that substantially exhibits the temporal expression pattern of the E1b region gene(s) deleted.

An adenoviral vector as described in claim 1 wherein said deletion of said E1b region genes comprises p19, 55K, and pIX.

An adenoviral vector as described in claim 2 wherein said deletion of said E1b region genes comprises p19 and 53K.

An adenoviral vector as described in claim 2 wherein said deletion of said E1b region genes comprises pIX.

A recombinant adenoviral vector that has the properties of a recombinant adenoviral vector selected from the group consisting of pΔKmTNF, pΔE1B/CD, pΔ55K/CD,  $\Delta$ KmTNF,  $\Delta$ E1B/CD and  $\Delta$ 55K/CD.

An recombinant adenoviral vector as described in claim 1 wherein said heterologous gene encodes a protein selected from the group consisting of tumor necrosis factor alpha, interferon gamma, an interleukin, a cell suicide protein, cytosine deaminase, thymidine kinase and mip-3.

- 7. Cells comprising said adenoviral vectors of claim 1.
- 8. Cells comprising said adenoviral vectors of claim 5.
- 9. Cells comprising said adenoviral vectors of claim 6.

A method for treating a mammal having a neoplastic condition in need of said treatment, comprising administering to said mammal a therapeutically effective dose of said adenoviral vectors of claims 1, 5 or 6.

A method as described in claim 10 further comprising administering with said adenoviral vectors a chemotherapeutic or an immunosuppressive.

A replication competent, recombinant adenovirus that has the properties of an adenovirus selected from the group consisting of ΔKmTNF, ΔE1B/CD and Δ55K/CD.

ONYX1022/Specification/1022

28

20

10.